

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 H04R1/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 546 950 A (CECH ET AL) 15 October 1985 (1985-10-15) column 1, line 26 - column 5, line 20; figures 1,2,7	1-10,12
A	----- US 4 396 807 A (BREWER ET AL) 2 August 1983 (1983-08-02) column 2, line 11 - column 3, line 6; figures 1-3	1-12
A	----- PATENT ABSTRACTS OF JAPAN vol. 2000, no. 23, 10 February 2001 (2001-02-10) -& JP 2001 157102 A (HITACHI KOKUSAI ELECTRIC INC), 8 June 2001 (2001-06-08) abstract ----- -/--	1-12



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- \*&\* document member of the same patent family

Date of the actual completion of the International search

6 April 2005

Date of mailing of the International search report

25/04/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 459 802 B1 (YOUNG GARRIT A. R) 1 October 2002 (2002-10-01) column 1, line 34 - column 4, line 17; figures 1-6 -----	1-12
A	WO 94/04009 A (WINSJANSEN, ERLING) 17 February 1994 (1994-02-17) page 3, line 11 - page 4, line 24; figures 1,2,4,6 -----	1-12
A	US 6 128 393 A (KONDO ET AL) 3 October 2000 (2000-10-03) column 2, line 61 - column 4, line 33; figure 1 -----	1,2,11, 12

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